

Making Pavement Preservation Pay: Highlights from the National Pavement Preservation Conference

17th Annual

TERRA
Pavement
Conference

February 14, 2013

Larry Galehouse, Director
National Center for Pavement
Preservation



National Center for Pavement Preservation

- **Established in 2003**
- **Sponsored by FP² Inc.**
- **Affiliated with Michigan State University,
Department of Civil & Environmental
Engineering**
- **Quasi-Governmental, Non-Profit Entity**
- **Focused on Outreach, Education, and
Research**
- **Experienced Staff of Engineers with
extensive agency backgrounds**



Highway Capital Improvements

Expenditures

Needed = \$186 billion annually

Current = \$ 70.3 billion annually

**Short Fall = \$115.7 billion
annually**

ASCE news

FEBRUARY 2009 • VOLUME 34 • NUMBER 2

The newspaper for members of the American Society of Civil Engineers

ASCE's Infrastructure Report Card Gives Nation a D, Estimates Cost at \$2.2 Trillion

that conferred four years ago, the projected | the report card components of our 2009 | The Society's 1998 infrastructure

Roads

D-

Americans spend 4.2 billion hours a year stuck in traffic at a cost to the economy of \$78.2 billion, or \$710 per motorist. Poor conditions cost motorists \$67 billion a year in repairs and operating costs. One-third of America's major roads are in poor or mediocre condition and 45 percent of major urban highways are congested. Current spending of \$70.3 billion per year for highway capital improvements is well below the estimated \$186 billion needed annually to substantially improve conditions.

Washington, D.C., on Wednesday, January 28, approximately two months ahead of schedule. Although the overall grade given by the "report card"—a D—is the same as

Society's executive director. "Recognizing the importance of informing and contributing to this discussion in a timely manner, we made an unprecedented decision to release

ASCE OFFERS SUGGESTIONS FOR ECONOMIC STIMULUS PLAN

NATIONAL
news

For decades, ASCE has attempted to turn the attention of the nation's leaders to

commerce and bind us together." As a strong supporter of the president's plan, the Society has prepared a document entitled "Principles for Infrastructure Stimulus Investment" and presented it to Obama's transition team as well as to congressional leaders.

The principles were developed by ASCE staff members and by the roughly 800 members



The Society released its 2009 Report Card for America's Infrastructure at the National Press Club, in Washington, D.C., on Wednesday, January 28. On hand to discuss the grades with journalists were

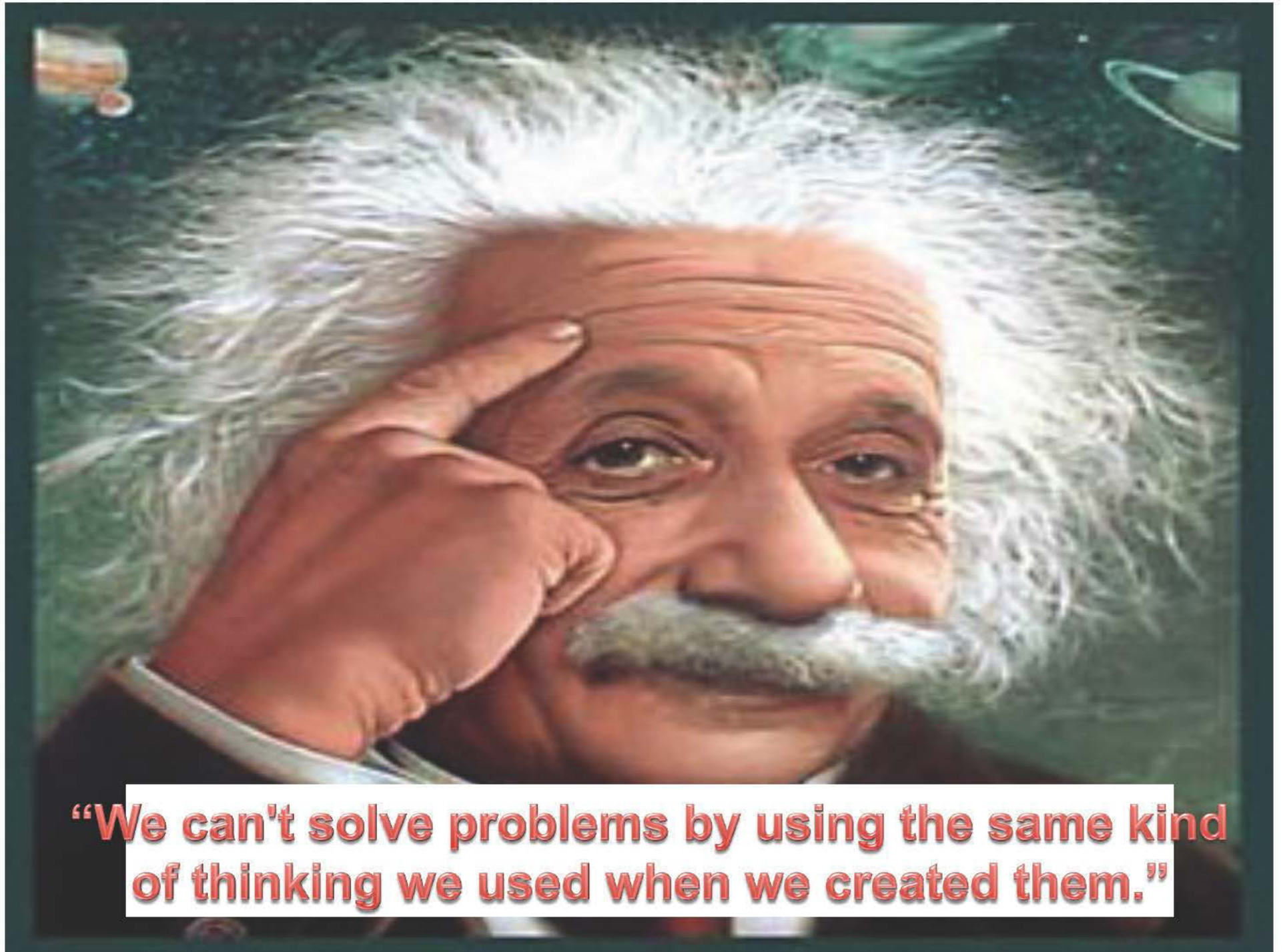


Traffic Congestion in U.S.

Urban Travelers in 2009

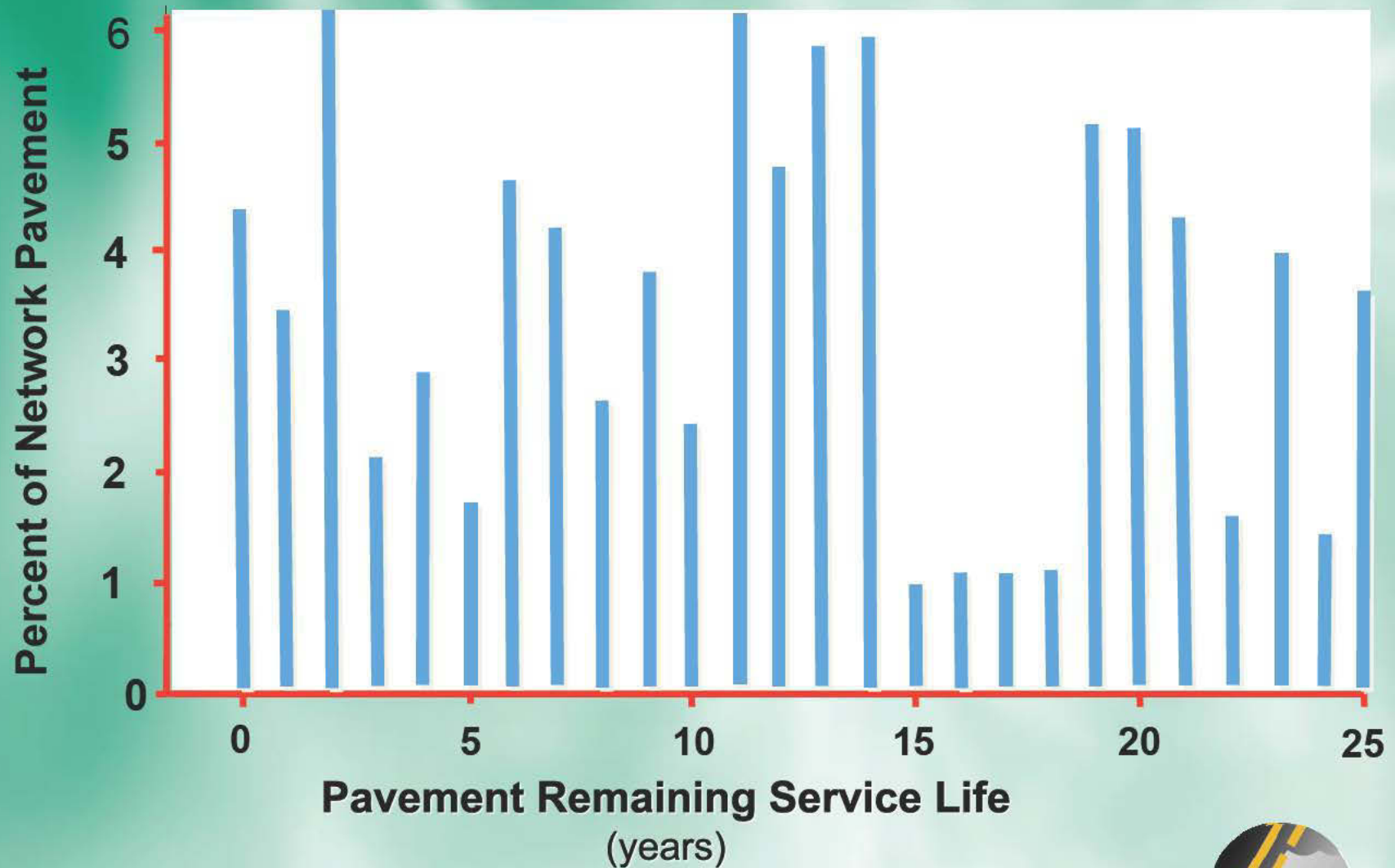
Delayed = 4.8 billion hours

Wasted = 3.9 billion gallons fuel

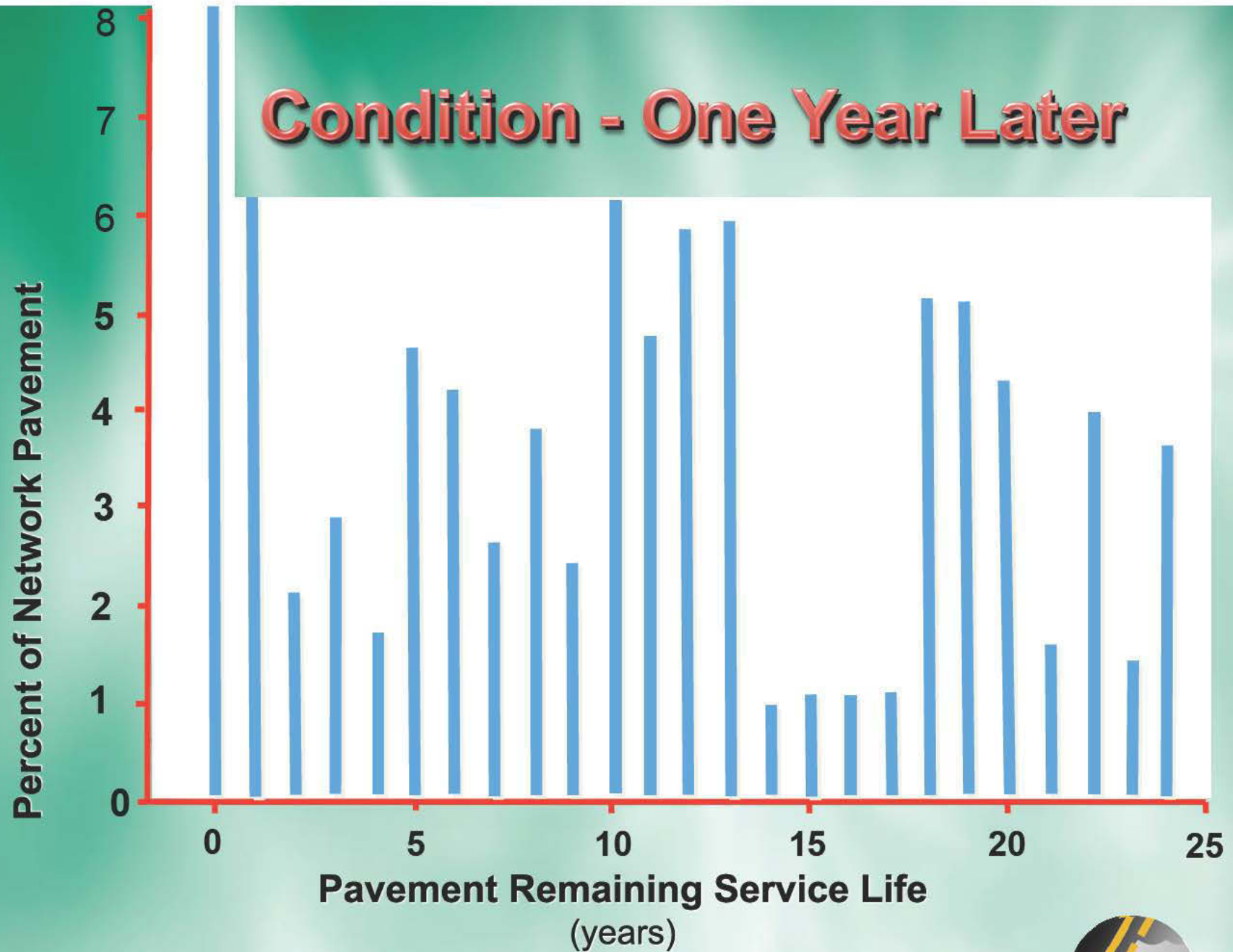


“We can't solve problems by using the same kind of thinking we used when we created them.”

Current Condition



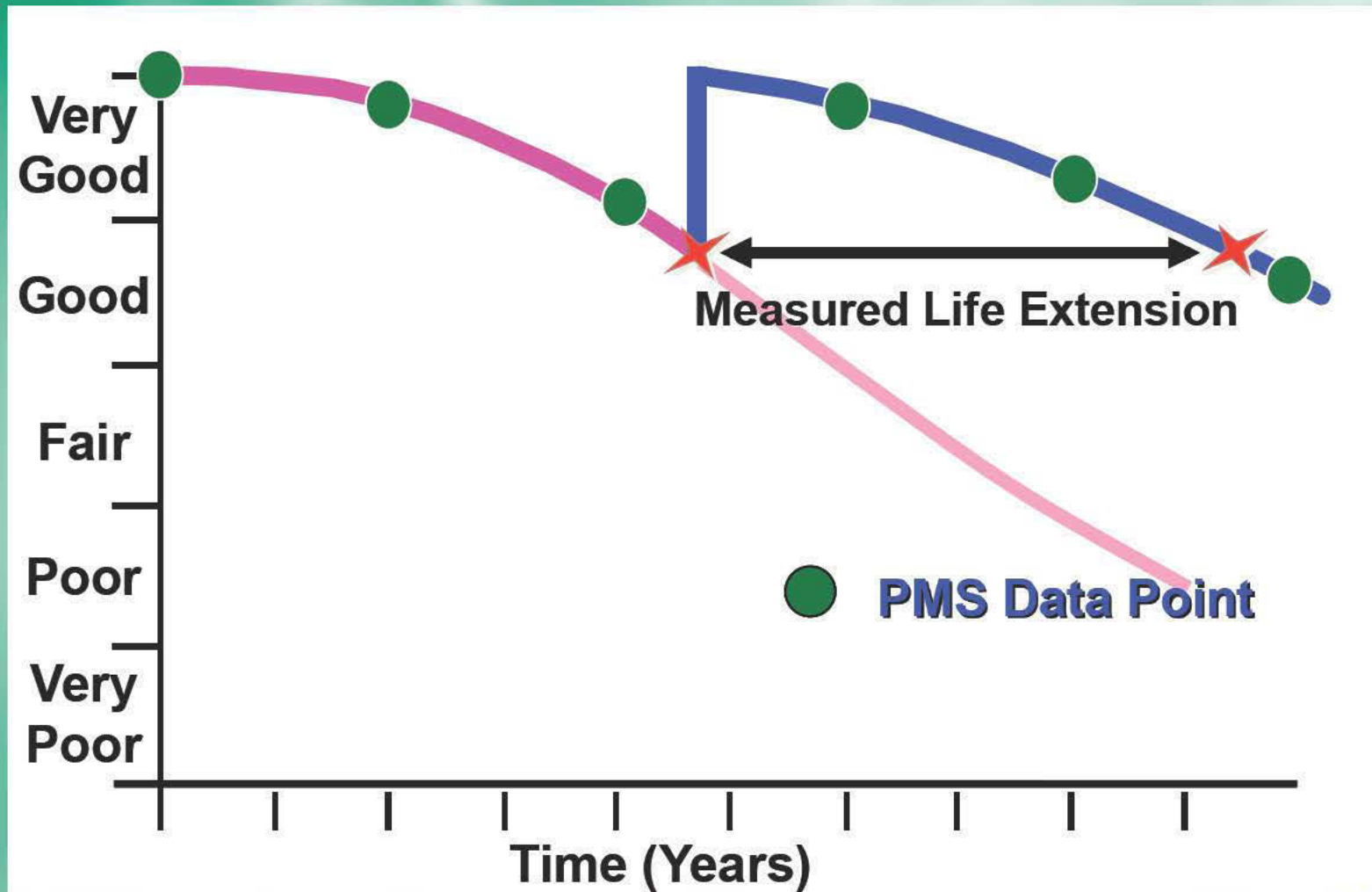
Condition - One Year Later



Typical Life Extensions (Years)

Treatment	Good Condition (PCI=80)	Fair Condition (PCI=60)	Poor Condition (PCI=40)
Crack Fill	1 - 3	0 - 2	0
Crack Seal	1 - 5	0 - 3	0
Fog Seal	1 - 3	0 - 1	0
Chip Seal	4 - 10	3 - 5	0 - 3
Micro-Surfacing	4 - 8	3 - 5	1 - 4
Thin HMA	4 - 10	3 - 7	2 - 4

Life Extension



Defining Sustainability

Sustainability means meeting present needs without compromising the ability of future generations to meet their needs.

Sustainable Development

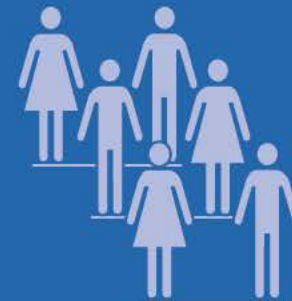
Economy



Ecology



**Social
Responsibility**



The Eco-efficiency Analysis

Energy



Raw Materials



Land Use



Risk



Toxicity Potential



Emissions



AASHTO

Transportation System Preservation
Technical Services Program

TSP•2



TSP•2 Background

- **Approved by the AASHTO Board of Directors on May 8, 2005 (PR-10-05)**
- **Created to support the research, technical, and program needs of the member States in their development of Transportation System Preservation programs**
- **Implemented through the National Center for Pavement Preservation at Michigan State University**

Regional Pavement Preservation Partnerships





12 state DOTs & 3 Provinces

Current Chair

Tara Liske,
Manitoba I & T

Task Forces

1. New Products and Processes
2. Preservation Product Performance Evaluations
3. Best Practices for Longitudinal Joint Construction and Maintenance
4. Contractor Certification
5. Public Communication on the Benefits of Pavement Preservation



NATIONAL PAVEMENT PRESERVATION CONFERENCE

AUGUST 27-30, 2012 | NASHVILLE, TN

**ROAD TRIP:
DRIVING THE MESSAGE FOR CHANGE**



Registered Conference Delegates = 55

Field Demo Attendees = 370

Treatments Demonstrated

Live = 5

Pre-placed = 16

Exhibitor Displays = 47

Opening Plenary Session



Technical Sessions



Pavement Preservation Ribbon Cutting



Demo Site

Concrete Display

Diamond Grinding
Longitudinal Grooving
Dowel Bar Retrofit
Saw & Seal
Compression

Equipment Display

Roadtec & Wirtgen

Crack Seal Display

Gilsonite

Pavecoat

Liquid Road

TRMS
S

Scrub Seal

Skidbrader &
Reclaimate
Seal

Pass Fog
Seal

Chip Seal

Fiber Mat

Micro Surface

Live Demonstrations



Live Demonstrations



Live Demonstrations



Pre-Placed Demonstrations



Future Partnership Meetings



Northeast: April 29-May 1
Annapolis, Maryland



Southeast: May 29-31
San Antonio, Texas



Rocky Mountain West: October 7-9
Anchorage, Alaska



Midwestern: November 12-13
Indianapolis, Indiana

**2016 National Pavement Preservation
Conference**



Regional Bridge Preservation Partnerships



**MICHIGAN STATE
UNIVERSITY**



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